# ANNUAL ENVIRONMENTAL HEALTH SURVEY SUMMARY CALIFORNIA DEPARTMENT OF EDUCATION FISCAL YEAR 1998-99

## **INTRODUCTION**

The Institution Program of the Environmental Management Branch (EMB) conducts annual environmental health surveys of the schools operated by the Department of Education (DE). These surveys describe and document the environmental health conditions within the schools. The reviews also provide DE management with an objective evaluation upon which administrative decisions can be based to assure a safe and healthy environment for students and staff.

## SPECIALIZED SERVICES FOR FISCAL YEAR 1998-99

In addition to the annual survey, the Institution Program provides specialized services as requested and jointly agreed upon by our respective departments. These specialized services include environmental health and safety training, consultation, construction plan review, epidemiological studies and assistance with designated studies or pilot projects.

During fiscal year 1998-99 we were asked to provide "ServSafe" Food Certification Courses at two locations for the DE staff. This rigorous two-day course encompassed all aspects of food service operations including Hazard Analysis Critical Control Point programs, personal hygiene, vector control and equipment maintenance. On July 15 and 16, 1998 the course was held in Sacramento for staff of the Fremont School and other DE employees. On August 26 and 27, 1998 the course was held in Riverside for staff of the Riverside School and other DE employees.

## **SUMMARY OF FINDINGS FROM FISCAL YEAR 1998-99**

The following is a summary of items noted during the surveys that are considered to be of major environmental health significance. We suggest that you review the individual survey reports for a detailed discussion of each item.

## TOXIC SUBSTANCES AND HAZARDOUS WASTE MANAGEMENT

The staff and students at the School for the Deaf, Fremont are allowed to purchase chemicals for cleaning and maintenance. This situation has created a chemical safety problem in handling, storage and use of the cleaning products. As an example, we found that in many instances the Material Safety Data Sheets (MSDS) for the products were unavailable. This makes it impossible for staff to recognize the dangers of using the products and it significantly increases the chance of a hazardous chemical exposure by students and staff. It is recommended that a procedure be developed to require evaluation, approval, and submission of MSDS

information for all chemicals before any cleaning products are purchased. This would allow the facility to review products, standardize training to include the proper use of new and existing chemicals, and control the volumes, types, and toxicity of chemicals stored in the work areas.

The staff is aware of the potential hazards associated with use of various types of chemical products and has begun to reduce the amount currently used in their work areas. However, we recommend that the periodic inventory and reduction of unused or outdated chemical items be encouraged and made a priority. When chemical products are no longer useful, the Hazardous Materials Coordinator and Plant Operations should be notified to arrange for disposal.

## INJURY AND ILLNESS PREVENTION PROGRAM (IIPP)

All the schools are in the process of developing and implementing an Injury and Illness Prevention Program (IIPP). However, at the School for the Deaf, Fremont many of the employees did not appear to have a good working knowledge of the IIPP. Many of the staff were unable to locate the IIPP folder. This was a particular problem in the residential portions of the schools, as safety training was not being conducted on a routine basis.

Documented training should be provided to staff on the elements of the IIPP such as the hazard communication/right to know program, bloodborne pathogen program, electrical safety program, lockout/tagout program, respiratory protection program and the confined space program. This information is critical for the proper management of the IIPP program and compliance with the occupational health and safety regulations.

The Material Safety Data Sheets (MSDS) information folder/binders were found to be incomplete in all the schools. The MSDS relevant to the particular chemicals used at various work sites should be available at all times. Additionally, personal protection equipment (PPE) required by the MSDS should be provided and maintained in a clean or "readily usable" condition where required.

# **WATER SUPPLY**

The water supply for all the schools is provided by an approved municipal water system.

The School for the Deaf, Fremont is the only school that does not have a cross-connection control program. The school should develop the program and require that all backflow prevention devices be tested annually by a certified tester or testing company. The results of all testing should be maintained on-site in a permanent file. A current inventory of all backflow prevention devices now in use should be developed. The inventory should include the location, type, model, repairs and testing results for each of the devices.

# **SEWAGE DISPOSAL**

All schools are connected to approved municipal systems. No deficiencies were noted during the surveys.

## **SOLID WASTE**

The management of solid waste from the point of generation to disposal is reviewed to ensure that wastes are disposed of through the appropriate waste stream. Refuse containers and storage areas should be maintained in a manner that will not create a nuisance or expose staff or students to any unnecessary health or safety risks at any point along this waste stream.

The refuse bins at many of the schools were open with trash and debris littered on the ground around the bins. To minimize odors and the attraction of flies and other vermin, the refuse bins areas should be kept free of litter and the lids should remain closed at all times.

# **SWIMMING POOLS**

Swimming pools are evaluated for the structural integrity, water quality, sanitation, routine maintenance and safety aspects of pool operation. The maintenance of the swimming pools and pool chemistry continues to improve in all the schools. The records for water clarity and pool chemistry were current for all schools.

The School for the Deaf, Riverside should provide the swimming pool area with a life buoy, complete with tethered line, for use during an emergency. The swimming pool safety equipment at all the schools should be itemized and checked for operation prior to opening the pool each day.

## FOOD SERVICE

Generally, the kitchens in all the schools were found to be clean, organized and well maintained. Those responsible should be commended for their efforts.

Surveys were conducted to determine the level to which Hazard Analysis Critical Control Points (HACCP) principles and concepts are being used. HACCP focuses on those steps in food preparation where food-handling errors could result in foodborne illness. Food managers are able to make appropriate decisions to insure food safety by monitoring food at critical control points during receiving, storing, processing, holding and serving,.

The food mangers in each of the schools have implemented a HACCP program. The supervisory staff have completed HACCP training and are in the process of training other staff members regarding safe food handling procedures.

The two walk-in freezers at the School for the Deaf, Riverside were overcrowded at the time of the survey, resulting in poor air circulation around cartons and containers of stored food.

Consideration should be given to providing additional freezer space for temperature control and to meet the increased demand on the equipment.

The wash temperature, final rinse temperatures and the final rinse pressure of the dishwasher at the School for the Deaf, Fremont main kitchen should be monitored and recorded during each meal service. The final rinse temperature should be between 180°F and 195°F. The final rinse pressure should be between 15 and 25 psi (with 20 psi being ideal). Any deviation from manufacturer's recommended operating ranges should be reported to maintenance staff for corrective action. A standardized form should be provided in the kitchen dishwashing areas and managers should periodically check documentation for completeness, breakdowns, or errors.

#### **CAFETERIAS**

The working area of the Feast Café located at the School for the Deaf, Fremont was overcrowded with unused food service equipment. Non-essential equipment and supplies should be removed to utilize available workspace and minimize the potential for an injury and/or a possible vermin harborage.

To eliminate a potential fire hazard we suggest that the air exhaust flue in the hood over the stove in the Feast Café at the School for the Deaf, Fremont be cleaned at least once a year to remove dirt and grease that may collect in the air exhaust ductwork. Plant operations staff may be able to suggest a commercial restaurant equipment cleaning and repair company.

## FOOD WAREHOUSE

The ceilings were leaking extensively in the food warehouse area at the School for the Deaf, Riverside. The damaged areas on the inside of the building should be renovated and repainted to provide a smooth, impervious, and easily cleanable surface. The warehouse and kitchen roof should be repaired or replaced. This should be scheduled as a high priority item.

The warehouse at the School for the Deaf, Fremont was found to be in good order with food items stored at least six (6) inches off the floor and cleaning chemicals that could cause eye damage stored below eye level. As part of the HACCP program, a procedure should be developed for receiving hazardous foods. The procedure should include visual and temperature checks of foods as well as action to be taken in rejecting thawed, damaged, or insect infested products.

## **MEDICAL SERVICES**

The Infirmary is located on the property of the School for the Blind, Fremont and operated by School for the Deaf. This facility serves students from both schools. The current building has an acute overcrowding problem, which encourages incompatible use of the space available. The food refrigerator and microwave oven identified as being a potential source of cross-contamination, in prior year surveys, are still located in a patient treatment room. Some progress has been made in minimizing potential cross-contamination in that the nasal suction

device in the physicians' office has been removed. It is our understanding, based on our conversations with staff, that the existing facility will be replaced.

Food for residents in the infirmary is transported from the main kitchen located at the School for the Deaf, Fremont. Potentially hazardous food should be held below 41°F and above 140°F to prevent bacterial growth. The temperature of all hazardous foods should be documented. This is very important when the food is received at the infirmary. When hazardous foods are held the temperatures should be documented during cooling and reheating. The temperature of the resident food/snack refrigerator should also be monitored and recorded daily. Main kitchen staff may be able to provide a model temperature log for recording refrigerator and food temperatures.

The peeling and flaking paint on the infirmary kitchen wall should be removed and the leaks repaired. The walls should be refurbished and repainted to provide a smooth, easily cleanable surface.

## **VECTOR CONTROL**

No significant problems with rodents, cockroaches, or other vermin were noted at any of the schools during time of the surveys. The vector control service staff should be commended.

## **HOUSING**

Housekeeping in the kitchens and residences appeared to be good at the School for the Deaf, Fremont. However, it was noted that the mops were not stored properly in the janitorial closets. All mops should be rinsed thoroughly after each use and air dried to prevent moisture accumulation and odors. In several janitorial closets, the mops were dirty and sitting in soiled or dirty rinse water.

Many of the buildings (housing and food service areas) at the School for the Deaf, Riverside have extensive water damage due to leaks in the roofs. The roofs should be repaired to prevent further internal and external damage to the structures.

Inadequate lighting was noted in the living areas at the School for the Deaf, Riverside (Southridge Building 82) and at the School for the Blind, Fremont (Pachappa II). It is recommended that a minimum of thirty (30) foot-candles be provided for proper illumination in these areas.

The damaged and missing toilet stall doors and frames in the School for the Deaf, Riverside Palomar II housing units should be repaired and/or replaced to provide a smooth, easily cleanable surface.

The MSDS binders located in the housing units at the School for the Deaf, Riverside were not available or were found empty at the time of the survey. The binders should contain information regarding the chemicals that are stored or used in the units. To facilitate access to MSDS information during training and emergencies, it is recommended that the MSDS binders be

provided with an indexing and tabbing system. The index should refer to the tabbed areas of the binder. It is also recommended that critical information such as product name, personal protection equipment and first aid procedures be highlighted for quick reference in the event of an emergency.

## **MISCELLANEOUS**

The graphic arts shop at the School for the Deaf, Fremont did not have adequate exhaust ventilation in the dark room. A minimum of ten (10) air exchanges per hour should be provided to effectively remove fumes and vapors from this area.

The vocational woodworking shop at the School for the Deaf, Fremont was very limited in work and storage space. Traffic aisles and kickback zones were crowded which increased hazard risks and prevented easy exit from the shop in the event of a fire. The shop should be reorganized to provide more work and storage space. Additional storage space for supplies and raw materials would eliminate congestion and provide a safe work area. The flammable materials cabinet should have a functional lock to ensure security of the materials and limit the potential for chemical exposure.

Safety signs should be installed in the maintenance shops for all schools above or near all tools that require the use of personal protection devices while operating the equipment.

The School for the Deaf, Riverside should make every effort to remove all hazardous print shop supplies that are no longer in use, such as the rubber-based solvent inks and cleaning solvents. All unused hazardous products should be properly disposed of within 90 days in accordance with applicable regulations.

Safety, personal protective equipment, and chemical use training should be incorporated into the curriculum for the vocational educational classes available in all of the schools. Staff should continue to ensure that training is ongoing and well documented. Use of weekly safety inspection sheets may help identify topics for training and other safety needs.

# **CONCLUSIONS AND RECOMMENDATIONS**

Our staff of Registered Environmental Health Specialists will continue to perform surveys during the year to identify environmental health and safety issues and will work with the Department of Education to develop corrective and preventive measures to address those issues. This year we will be offering "Tailgate Training Sessions" as part of our surveys. These sessions are designed to respond to questions and provide subject matter instruction to the staff.

We believe that significant progress has been made to improve the environmental health and safety conditions at the schools operated by the Department of Education over the past several years. The cooperative efforts of the administrators and staff have led to the success of the program. Significant improvement has been made in the Injury and Illness Prevention Program, Hazard Communication/Right to Know program, Medical Waste Management program, Cross Connection Control program, Toxic Substances and Hazardous Waste

Management programs, Recycling programs, Hazardous Analysis and Critical Control Point programs and Bloodborne Pathogen programs. We will continue to assist the individual schools with the on-going evolution and maintenance of these environmental health and safety programs by providing consultation, plan review, training and assistance with special projects. The environmental health survey process will "test" the systems in place and will provide feedback to the Department of Education.